

SEQUENCE LISTING



<110> Sang-Yup Lee
Ki-Jun Jeong

<120> ESCHERICHIA COLI STRAIN SECRETING HUMAN
GRANULOCYTE COLONY STIMULATING FACTOR (G-CSF)

<130> HYLEE60.001APC

<140> 10/009792

<141> 2001-12-13

<150> PCT/KR01/00549

<151> 2001-03-31

<150> KR 2000/17052

<151> 2000-03-31

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<213> Artificial Sequence

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<223> Synthetic peptide sequence

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29

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agcagctgcc ccagccaggc cctgcagctg gcaggctgct tgagccaa 48

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<211> 32

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<211> 39

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caccatcacc atatcgaagg ccgtactccg ttaggtcca 39

<210> 16

<211> 41

<212> DNA

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cccaccagg gtgcatgcc ggccttcgcc tctgcttcc agcgccgggc aggaggggtc 540
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Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
 20     25     30
Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu Val
 35     40     45
Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser Cys
 50     55     60
Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His Ser
 65     70     75     80
Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile Ser
 85     90     95
Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala Asp
100    105    110
Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala Pro
115    120    125
Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala Phe
130    135    140
Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser Phe
145    150    155    160
Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
165    170
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cagatggaag aactgggaat ggcccctgcc ctgcagccca cccagggtgc catgccggcc 420
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Met Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu
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Lys Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu
20 25 30
Gln Glu Lys Leu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu Glu Leu
35 40 45
Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu Ser Ser
50 55 60
Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln Leu His
65 70 75 80
Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu Gly Ile
85 90 95
Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp Val Ala
100 105 110
Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly Met Ala
115 120 125
Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala Ser Ala
130 135 140
Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu Gln Ser
145 150 155 160
Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln Pro
165 170 175

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<212> DNA
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<210> 23
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<400> 23
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ttctgtca agtgc 135

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20 25 30
Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys
35 40 45

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aggactccgt taggtccagc cagctccctg cccagagct tctgtctcaa gtgcttagag 180

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Met Ser Ile Ser Met Phe Ser Ala Thr Ala Ser Ala Ala Gly Pro His
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His His His His Ile Glu Gly Arg Thr Pro Leu Gly Pro Ala Ser
35 40 45
Ser Leu Pro Gln Ser Phe Leu Leu Lys Cys Leu Glu
50 55 60

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Ala Gly Pro His His His His His Ile Glu Gly Arg Thr
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